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EXAMINER

HUYNH, C

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2776

3

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/322,720

Applicant(s)

LYNESS, STANLEY W.

Examiner

Cong-Lac Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22, 24 and 26-48 is/are rejected.
- 7) ☐ Claim(s) 23 and 25 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 20) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-3, 36 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 states that "the hierarchy position being identified by *position values* in the dimensions that are *different* from the node level and the node-in-level".

On the other hand, claims 2-3 states that the *position values comprise the depth value and the position-in-level value*.

Regarding claim 36, the feature of a user interface window for navigation of a hierarchy of nodes that occupies less than 25% of the web page is not disclosed in the specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-4, 8, 15-17, 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2-3, it is confusing that the depth value and the position-in-level value are in the form of a *non-integral* number since the levels (0-3) disclosed in figure 1 are *integer* numbers.

Regarding claim 4, the word a "node-in-value level" (line 2) does not make sense.

Correction is required.

In addition, since claim 3 states that the position-in-level value is a non-integral number, which is a floating-point number, it is confusing when claim 4 states that "a node-in-level value *identifying one node plus a floating-point number representing an offset* of the position from that node".

Regarding claim 8, it is not clear what Applicants means in "*and within a band space is allocated* so that the subspace of a parent has the *same dimension* along the band as *the sum of the dimensions* of its children along the adjacent band".

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Regarding claims 15-17, it is not reasonable when the first type of action is dragging and the second type of action is clicking. Users can not drag an object without clicking on the object first. That feature is stated in the specification (page 28, lines 28-29).

Claim Objections

5. Claims 13 and 14 are objected as being duplicate claims. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 6-7, 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Theisen et al. (US Pat No. 5,877,775, 3/2/99, filed 8/6/97).

Regarding independent 6 and claim 7, Theisen discloses:

- displaying representations of nodes of a hierarchy in a space on a display, each node representation fully occupying a subspace within the space (figure 3)
- allocating the space entirely to the subspace (figure 3)

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- the nodes are organized in levels in the hierarchy and the space is allocated among levels so that one level is fully represented in a dimension of the display that corresponds to changing levels and the levels of the hierarchy above and below the one level that are at least partially represented (figure 3)

Regarding independent claim 15 and dependent claims 16 and 17, Theisen discloses:

- displaying a representation of a portion of a hierarchy of nodes to a user (figures 7A-B)
- associating with each node an action to be performed by an application, the action being other than navigation of the hierarchy, and enabling a user to navigate in the displayed representation of the portion of the hierarchy by a first type of action, which is clicking (figure 15, user clicks and drags on container label; col 8, lines 22-27)
- enabling a user to trigger the action associated with a displayed node of the hierarchy by invoking the node using a second type of action, which is dragging (figure 15, user clicks and drags on container label; col 8, lines 22-27)

8. Claims 32-35, 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Dolan et al. (US Pat No. 5,801,702, 9/1/98, filed 3/9/95).

Regarding independent claim 32 and claim 33, Dolan discloses:

- an area that provides a navigational interface that permits continuous navigation of a hierarchy of nodes (figure 1)
- said nodes comprises links to other web pages (figures 1-2)

Independent claim 34 and claim 35 are the web browser of claims 32-33, and therefore are rejected under the same rationale.

Regarding independent claim 48, Dolan discloses:

- displaying a portion of a hierarchy at a browser (figure 1)
- enabling a user to navigate continuously through levels and nodes of the hierarchy (figure 2)
- delivering portions of the hierarchy from a remote server to the browser in time to enable the continuous navigation during navigation (figure 8A-C)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theisen et al. (US Pat No. 5,877,775, 3/2/99, filed 8/6/97).

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Regarding independent claim 1, Thiesen discloses:

- identifying a hierarchy position in a space defined by a hierarchy of nodes, the space having at least two dimensions, each node being uniquely identifiable within the space by values in the respective dimensions (figure 3)
- the hierarchy position being identified by position values in the dimensions that are different from the node level and the node-in-level (figure 3)

Thiesen does not explicitly disclose the including of a node level identifying the node's hierarchy level and a node-in-level identifying the node uniquely among nodes in that level. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have incorporated the node level and the position of a node in a level into Thiesen. Since Thiesen shows the hierarchical structure of nodes, it motivates the recognizing of levels of nodes and the position of a node in each level.

Regarding claims 2-3, which are dependent on claim 1, Thiesen does not explicitly disclose the position values comprises a depth value and a position-in-level value, both in the form of a non-integral number. However, since the position of a node in the hierarchy is based on the X, Y, and Z coordinates, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that the X, Y, Z coordinates are non-integral numbers.

Regarding claim 4, which is dependent on claim 3, as disclosed in claim 3, the node-in-level value is a non-integral number, which is a floating-point number.

Regarding claim 5, which is dependent on claim 1, Thiesen discloses the using of hierarchy position to identify a focus of a user's view of a hierarchy (the hierarchy structure can be expanded or collapsed upon user's selection (figures 10A-B, 11A-B, 13; col 6, lines 44-67).

11. Claims 9-11, 26-31, 36-42, 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolan et al. (US Pat No. 5,801,702, 9/1/98, filed 3/9/95).

Regarding independent claim 9, Dolan discloses for a node in a hierarchy of nodes:

- rendering a container associated with the node and a representation of information associated with the node, the container having dimensions that change with an amount of space dynamically allocated to the node based on a changing focus in the hierarchy (figures 2, 8B-C, 11A-C)
- drawing the container and the representation on a display (figures 1-2) , and when the focus changes,
- re-rendering the container with updated dimensions and drawing the container on the display (figures 11A-C)

Dolan does not explicitly disclose the copying the rendered representation to a new location without re-rendering.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that the copying of the rendered representation to a new

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location is merely the same as the re-rendering of the representation when the focus changes.

Regarding claims 10 and 11, which are dependent on claim 9, Dolan discloses that the drawn container indicates the node's position in the hierarchy, its relationship to nearby nodes and the representation including graphics or text or both (figure 2).

Regarding independent claim 26, Dolan discloses:

- displaying information about a portion of a hierarchy of nodes including a node at the top of a sub-hierarchy of the hierarchy (figure 8A)
- displaying the information about the sub-hierarchy when user navigates the sub-hierarchies for an approaching view (figures 8A-B)

Dolan does not explicitly disclose the fetching, from a server, information about the sub-hierarchy. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Dolan to include that feature. The fact that Dolan displays information of sub-hierarchy as a result of the user's navigation implies that Dolan fetches said information before displaying to users.

Regarding independent claim 27, Dolan discloses:

- providing to the client a portion but not all of the hierarchy definition, the portion referencing other portions of the hierarchy in response to user request (figure 8B-C)

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Dolan does not explicitly disclose the receiving at a server a request from a client for a hierarchy definition. Instead Dolan discloses that user can access an item, which can include files and directories, over the Internet by merely selecting said item from the graphical representation (col 3, lines 10-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have employed Dolan since users have to request at the server to access items over the Internet represented by a hierarchy of links (or nodes).

Regarding claims 28-29, which are dependent on claim 27, Dolan discloses:

- each of the portions comprises a sub-hierarchy (figure 8B).

Dolan does not explicitly disclose the determining the size of the portion to be provided to the client adaptively based on parameters for optimizing communication between the server and the client.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have incorporated that feature to Dolan since Dolan provides different sizes of portions to be displayed to users depending on which sub-hierarchy to be requested.

Regarding claims 30-31, which are dependent on claim 27, Dolan discloses the hierarchy and the sub-hierarchy and includes them with definitions of nodes (col 5, lines 24-49).

Regarding claim 36, which is dependent on claim 34, Dolan discloses that a user interface window permitting continuous navigation of a hierarchy of nodes occupies a portion of the web page (figure 1).

Regarding independent claim 37, Dolan discloses the continuous navigation of a hierarchy in which the navigation graph includes icons and associated descriptions connected so as to represent inter-relations of a hierarchical structure (figure 2; col 5, lines 24-63). Dolan does not explicitly disclose a device for navigating the hierarchy. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that users use a mouse to navigate the hierarchy of icons.

Regarding claims 38-39, which are dependent on claim 37, Dolan discloses:

- the hierarchy comprises a hierarchy function menu (figure 8)
- the hierarchy comprises a hierarchical file system (figure 2)

Regarding claim 40, Dolan discloses that the hierarchy comprises a document encoded in HTML (col 2, lines 31-67; col 14, lines 10-24). Dolan does not disclose that the document is encoded in XML.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included XML in Dolan to facilitate the writing of a web page in which web designers have more chances to create their own tags for the page.

Regarding claims 41-42, 44-46, Dolan discloses:

- the hierarchy index constructed from a document, list or table (figure 2)
- the hierarchy comprises an encoded hierarchy (figure 2)
- the hierarchy comprises categorized products (figure 8C)
- the hierarchy comprises characters belonging to a character set to be selected for text entry (figures 8A-C)

Dolan does not disclose that the hierarchy comprises postal addresses or other location by geographic region. Instead Dolan discloses email which has email address.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included the postal addresses into Dolan. Dolan has email with email addresses thus motivating the including postal addresses to give more information about an agent or a person related to the web page and the hierarchy.

Regarding claim 47, which is dependent on claim 37, Dolan discloses that the hierarchy comprises a corpus which is not hierarchical (figure 8B, "rear suspension" in the hierarchy is not hierarchical since it does not included any sub-directories).

12. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dolan as applied to claim 37 above, and further in view of Guck (US Pat No. 5,794,039, 8/11/98, filed 12/18/96).

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Regarding claim 43, which is dependent on claim 37, Dolan does not disclose explicitly the using of the Dewey Decimal number applied in the hierarchy (figure 10). Guck discloses the using of the Dewey Decimal number, which is an extension of an integer for organizing email messages (col 11, lines 30-55; col 1, lines 55-62).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Guck into Dolan to facilitate in organizing of the hierarchy of any size by applying the Dewey Decimal system into the hierarchy.

13. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotchey (US Pat No. 5,812,135, 9/22/98, filed 11/5/96).

Regarding independent claim 12, Kotchey discloses:

- receiving information indicating a displacement of a user input device within a two-dimensional frame of reference (user selects a particular node, col 3, lines 36-67; col 4, lines 1-6; figures 2, 7; col 5, lines 1-38)
- translating displacement in at least one of the dimensions to a rate of change of a hierarchy position used to identify a focus of a user's view of the hierarchy (figures 1-7; col 3, lines 36-67)

Kotchey does not explicitly disclose the rate of change of a hierarchy position used to identify a focus of a user's view of the hierarchy.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included that feature into Kotchey. The fact that Kotchey

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shows the change of the focus to display different partial views of the hierarchy implies that the changes of different views are recorded.

Regarding claim 13, which is dependent on claim 12, Kotchey discloses that one dimension represents a depth in the hierarchy, and the other dimension represents position-within-level (figures 1-2).

14. Claims 18-22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seidensticker, Jr. et al. (US Pat No. 6,108,784, 8/22/00, filed 4/3/97).

Regarding independent claim 18, Seidensticker discloses:

- displaying a representation of a portion of a hierarchy of nodes (figure 1)
- providing an emulation of an input device for enabling a user to navigate the hierarchy (figure 1)
- treating the user's manipulation as a manipulation of the input device in response to the user manipulating an input device for navigating the hierarchy (figure 1, col 3, lines 33-54; col 4, lines 40-62)

Seidensticker does not disclose explicitly that the input device is a return-to-center input device. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included a return-to-center input device to Seidensticker to enhance the manipulation of navigating a hierarchy.

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Regarding claim 19, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have recognized that the input device comprises a computer mouse.

Regarding claim 20, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have included a joystick in the input device since the joystick was well-known as an input device for games on the computer video.

Regarding claim 21, Seidensticker discloses the emulation includes rendering the device on the display (figure 1).

Regarding claim 22, Seidensticker discloses that the focus position in the hierarchy changes in response to user manipulation (col 3, lines 34-54; col 4, lines 41-62).

Regarding claim 24, Seidensticker discloses that the user manipulating enables the user to view a large hierarchy of nodes (col 4, lines 10-50).

Allowable Subject Matter

15. Claims 23 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kiernan et al. (US Pat No. 5,701,137, 12/23/97, filed 5/24/95) teaches a method for separating a hierarchical tree control into one or more hierarchical child tree controls in a graphical user interface.

Mehrle (US Pat No. 5,794,236, 8/11/98, filed 5/29/96) teaches a computer-based system for classifying documents into a hierarchy and linking the classifications to the hierarchy.

Sluiman et al. (US Pat No. 6,098,072, 8/1/00, filed 10/23/97) teaches a source code files in a file directory system having multiple hierarchies representing contextual views.

Smith et al. (US Pat No. 5,230,072, 7/20/93, filed 5/17/91) teaches a system for managing hierarchical information in a digital data processing system.

Bereiter et al. (US Pat No. 5,917,492, 6/29/99, filed 3/31/97) teaches a method and system for displaying an expandable tree structure in a data processing system graphical user interface.

Geller et al. (US Pat No. 5,844,554, 12/1/98, filed 9/17/96) teaches methods and systems for user interfaces and constraint handling configuration software.

Ahamed et al. (US Pat No. 5,628,011, 5/6/97, filed 1/4/93) teaches a network-based intelligent information sourcing arrangement.

Rowe et al. (US Pat No. 5,781,785, 7/14/98, filed 9/26/95) teaches a method and apparatus for providing an optimized document file of multiple pages.

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Harrison et al. (US Pat No. 5,833,470, 11/10/98, filed 9/24/96) teaches information/entertainment systems with user prompts.

Harrison et al. (US Pat No. 5,898,462, 4/27/99, filed 3/29/96) teaches methods for producing data storage devices for appliances which can be used to coach users in the performance of user-selected tasks.

Robinson (US Pat No. 5,842,218, 11/24/98, filed 12/6/96) teaches a method, computer program product, and system for reorienting categorization table.

Joyce et al. (US Pat No. 5,850,429, 12/15/98, filed 12/11/96) teaches a method and system for remotely controlling an interactive voice response system.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cong-Lac Huynh whose telephone number is (703)-305-0432. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached on (703) 305-4713. The fax number to this Art Unit is (703) 308-5403.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:


(703) 308-5403 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington. VA. Sixth Floor (Receptionist).

Clh

8/25/00


STEPHEN S. HONG
PRIMARY EXAMINER